

REMARKS

Claims 1 - 4 and 7 - 72 are pending, with Claims 1, 9, 16 and 17 in independent form. Claim 68 has been amended. Claims 5 and 6 have been cancelled. Claims 73 and 74 stand withdrawn pursuant to the subject Office Action.

Where appropriate, references to the Office Action are indicated by the specific paragraphs and/or pages, in parenthesis (e.g., Para. X, and/or Page X).

The Office Action includes an objection to the declaration for allegedly not including a post office address required by 37 C.F.R. § 1.33(a). (Para.s 1 and 3.) While Applicant's attorney respectfully submits the original declaration to be sufficient, a supplemental declaration is provided herewith.

Applicant thanks the Examiner for consideration of the new drawings and the withdrawal of the objection to the drawings. (Para. 1.)

Claims 73 and 74 stand withdrawn from consideration as directed to an invention that is independent or distinct from the invention originally claimed. (Para. 2.)

Claim 68 was objected to as duplicative of claim 65. Claim 68 has been amended to depend from claim 9 as recommended by the Examiner. (Para. 4.)

Claims 5 and 6 were objected to as duplicative of claims 46 and 47, respectively. Claims 5 and 6 have been cancelled. (Para. 4.)

Claims 25, 27, 29, and 31 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. (Para. 5.) More specifically, the Examiner indicates that the recitation of a media block beginning with a delta frame is not supported by the specification. The Examiner is directed to page 21, line 24 – page 22, line 4, wherein it is stated:

Moreover, the **frames, which may be full frames and/or delta frames** are arranged such that each media content block is a viewable unit – in other words all of the frames in the media content block may be viewed without reference to data regarding the other frames. [Emphasis added.]

Thus, the specification expressly teaches frames as full or delta frames. The Examiner is respectfully requested to reconsider and withdraw this objection.

Claims 1-7, 9-14, 16, 17, 24, 26, 28, 30, 44-57, 60, and 69-72 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,930,493 to Ottesen et al. (Ottesen) in view of U.S. Patent No. 6,539,164 to Shirakawa et al. (Shirakawa). (Para. 6, page 5.)

Claims 8 and 15 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of Shirakawa et al. as applied to claims 1 – 7, 9 – 14, 16, 17, 24, 26, 28, 30, 44-57, 60, 69, and 70-72, and further in view of U.S. Patent No. 5,899,582 to DuLac. (Para. 6, page 11.)

Claims 18 - 23, 32, 33, 35-38, 40, and 41 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of Shirakawa et al. as applied to claims 1 – 7, 9 – 14, 16, 17, 24, 26, 28, 30, 44-57, 60, 69-72 and further in view of U.S. Patent No. 6,360,234 to Jain et al. (Para. 6, pages 11-12.)

Claims 34 and 39 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of Shirakawa et al. and Jain et al. as applied to claims 18 - 23, 32, 33, 35-38, 40, and 41 and further in view of U.S. Patent No. 6,317,885 to Fries. (Para. 6, page 14.)

Claims 42 and 43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of Shirakawa et al. as applied to claims 1 – 7, 9 – 14, 16, 17, 24, 26, 28, 30, 44-57, 60, 69, and 70-72, and further in view of U.S. Patent No. 6,289,346 to Milewski et al. (Para. 6, page 15.)

Claims 58, 59, 61, 62, 64, 65, 67, and 68 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of to Shirakawa et al. as applied to claims 1 – 7, 9 – 14, 16, 17, 24, 26, 28, 30, 44-57, 60, 69, and 70-72, and further in view of U.S. Patent No. 6094680 to Hokanson. (Para. 6, page 16.)

Claims 63 and 66 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ottesen et al. in view of to Shirakawa et al. as applied to claims 1 – 7, 9 – 14, 16, 17, 24, 26, 28, 30, 44-57, 60, 69, and 70-72, and further in view of U.S. Patent No. 5,790,176 to Craig. (Para. 6, page 17.)

Applicant respectfully traverses the Examiner's rejections for the reasons set out below.

As has been previously characterized by Applicant, Applicant's claimed system for archiving time sequence media content from a media signal includes, amongst other features, a network, a data storage device, and a capture server including a converter for converting time sequence of digital frames into one or more sequential media blocks...wherein each media block begins with a whole frame. As has been previously noted by Applicant, this claimed distinction provides significant advantages with respect to the efficiency with which video frames may be retrieved for use. More specifically, media blocks beginning with partial video frames cannot be accessed without first accessing other frames. Media blocks beginning with whole frames, as taught and claimed by Applicant, can be directly accessed in a more granular, accurate and efficient manner. Thus, Applicant's claimed invention enables granular playback, for example of as little as a single frame.

The Ottesen reference has been characterized both by Applicant and the Examiner and, for purposes of brevity, this discussion will not be repeated here. However, it is noted that

Applicant has put forth, and the Examiner has agreed, that Ottesen fails to show or suggest Applicant's claimed teaching of media blocks, wherein each media block begins with a whole frame. (Para. 6, page 6.)

In this subject Office Action, the Examiner states that "...it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify each of the video segments disclosed by Ottesen to begin with a "whole frame" as taught by Shirakawa." (Para.6, page 6.) For the reasons set out below, Applicant respectfully traverses this statement and conclusion, as well as the rejections based thereon.

More specifically, Shirakawa does not show or suggest beginning a media block with a "whole frame" of video data. Shirakawa describes methods and devices for playing back information on or from a disk. Shirakawa contemplates and teaches demand or program playback of relatively large segments of content capable of being stored as groups of pictures (i.e. GOPs). See, for example, Shirakawa Column 24, lines 21-37:

Next, the operations will be described. A collection of a plurality of input images are referred to as a GOP (group of pictures). Each GOP includes the following; an I picture 104 intra-frame coded, P pictures 105 inter-frame coded by forward motion compensation, and B pictures 106 inter-frame coded by forward and backward motion compensation. Input image information composed of a succession of GOPs 102 is high-efficiency coded. A GOP header 103 representing information required for decoding the GOP 102 is appended to the coded data representing the GOP. A collection of the GOPs 102 is referred to as a sequence. A sequence header 101 describing information representing, for example, a screen size of the sequence may be appended to the start of the sequence. Coded data consisting of these data items is recorded on a video disk on which addresses are assigned to areas.

As is known in the art, under the MPEG standard, GOPs typically comprise a sequence of I, P, B frames plus the frame sequence information. This sequence of different frame types is called the Group of Pictures (GOP) structure, the structure taught by Shirakawa. (One common structure is 15 frames long, and has the sequence I_BB_P_BB_P_BB_P_BB_P_BB_.

Numerous other frame structures are known.) The portions of the Shirakawa reference cited by the examiner describe the processing of these I, P and B pictures during image retrieval.

As noted above, Applicant's claimed invention teaches and claims media blocks beginning with whole frames. Thus, Applicant's invention is not limited to the playback of GOPs, including multiple frames, as taught by Shirakawa. Neither does Applicant's invention require the use of the GOP frame sequencing information. In contrast, Applicant's claimed invention enables the playback of as little as a single frame, without the GOP sequencing information. Applicant's claimed invention thus enables flexible playback, including the ability to playback non-sequential, arbitrary ordered frames. This claimed feature of Applicant's invention, not shown or suggested by the art of record, provides substantial benefits over any consideration or combination of Ottesen and Shirakawa.

Thus, Applicant's claimed invention not only distinguishes technically from the combination of Ottesen and Shirakawa, but provides the significant advantages described above.

Independent Claims 9, 16, and 17 each recite the limitation of each media block beginning with a whole frame, as discussed above in connection with Claim 1. Accordingly, Claims 1, 9, 16, and 17 are submitted to be patentable over the references of record for at least the reasons set out herein.

The dependent claims are submitted to be patentable not only as dependent from allowable independent claims, but also as patentably distinct in combination with Applicant's currently claimed invention of a media block beginning with a whole frame. Applicants expressly reserve the right to argue the patentability of the dependent claims individually, and traverse specifically at this time the Examiner's contention that: Jain or Fries or any of the references is properly used to teach any aspect of metadata or close-captioning usage and/or rule-

based actions in combination with the presently claimed invention; Milewski or any of the references is properly used to teach any aspect of URL data retrieval in combination with the presently claimed invention; Hokanson or any of the references is properly used to teach any aspect of tiered storage in combination with the presently claimed invention; and/or that Craig or any of the references is properly used to teach any aspect of archiving in combination with the presently claimed invention.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and the allowance of the present application.

Applicant's undersigned attorney may be reached by telephone at (203) 438-1077.

All correspondence should continue to be directed to our address listed below.

Respectfully submitted,



Jeffrey L. Brandt
Attorney for Applicant

Registration No. 31,490

Date: 11/4/2005
Portfoliopl
Attn: Jeffrey L. Brandt
P.O. Box 52050
Minneapolis, MN 55402
United States of America